

What is claimed is:

1. A radio communication apparatus comprising:
 - a reception section that receives an OFDM signal;
 - 5 a reception quality measuring section that demodulates the received OFDM signal and measures reception quality of each subcarrier;
 - a subcarrier selection section that selects subcarriers having top-ranking reception quality as 10 subcarriers to be used based on a criterion notified from the other party of communication;
 - an averaging section that averages the reception quality of the subcarriers selected by said subcarrier selection section; and
 - 15 a reporting section that generates a report value indicating the reception quality averaged by said averaging section and reports the report value generated and information indicating the subcarriers selected by said subcarrier selection section to the other party of 20 communication.
2. The radio communication apparatus according to claim 1, wherein said subcarrier selection section selects subcarriers of reception quality equal to or higher than 25 a threshold as subcarriers to be used based on reception quality and a threshold decision against a threshold notified from the other party of communication.

3. The radio communication apparatus according to claim 2, wherein said threshold is controlled adaptively according to an amount of traffic in the own cell and neighboring cells.

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4. The radio communication apparatus according to claim 1, wherein said subcarrier selection section selects the same number of subcarriers as that notified from the other party of communication.

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5. The radio communication apparatus according to claim 4, wherein said number of subcarriers is controlled adaptively according to an amount of traffic in the own cell and neighboring cells.

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6. The radio communication apparatus according to claim 2, wherein said subcarrier selection section selects subcarriers to be used from among the subcarriers restricted beforehand out of all subcarriers.

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7. A communication terminal apparatus comprising the radio communication apparatus according to claim 1.

25 8. A radio communication method comprising the steps of:
 selecting subcarriers having top-ranking reception quality as subcarriers to be used based on a criterion notified from the other party of communication;
 generating a report value indicating average

reception quality of the selected subcarriers; and
reporting the report value generated and
information indicating the selected subcarriers to the
other party of communication.

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9. A radio communication system comprising:

a base station apparatus that sends information
which becomes a selection criterion of subcarriers
according to an amount of traffic in the own cell and

10 neighboring cells to a communication terminal apparatus;
and

a communication terminal apparatus that selects
subcarriers having top-ranking reception quality as
subcarriers to be used based on selection criterion

15 information sent from said base station apparatus and
reception quality of each subcarrier, and reports a report
value indicating average reception quality of the
selected subcarriers and information indicating the
selected subcarriers to said base station apparatus.

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